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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/353,592	07/15/1999	ANDRES RIVERA	101054	3821
27049	7590	09/03/2003		
OLIFF & BERRIDGE, PLC P.O. BOX 19928 ALEXANDRIA, VA 22320			EXAMINER HON, SOW FUN	

ART UNIT	PAPER NUMBER
1772	

DATE MAILED: 09/03/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/353,592

Applicant(s)

RIVERA ET AL.

Examiner

Sow-Fun Hon

Art Unit

1772

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 29 May 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-32 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other:

## DETAILED ACTION

### *Continued Prosecution Application*

1. The request filed on 05/29/03 for a Continued Prosecution Application (CPA) under 37 CFR 1.53(d) based on parent Application No. 09/353592 is acceptable and a CPA has been established. An action on the CPA follows.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Leung.

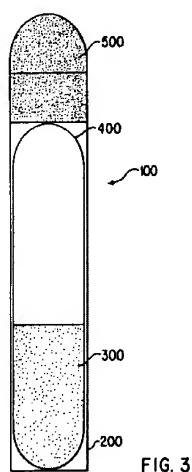
Leung has an applicator for dispensing an polymerizable and/cross-linkable material and includes a polymerization or crosslinking rate modifier (initiator) (abstract). Suitable materials can be 1,1-disubstituted ethylene monomers such as alpha-cyanoacrylates (column 4, lines 34-68). The polymerizable and cross-linkable materials and combinations thereof (column 3, lines 60-68) are siloxanes, silicones, polysulfides and polyphosphazenes, as well as thermoplastics and thermoplastic elastomers such as polyamides, nylons, polyethylene, polystyrene, polypropylene, fluorocarbon resins, polyurethanes, acrylate resins and polyesters (column 4, lines 11-18).

Leung teaches that the applicator container may be a syringe, a tube, a vial, a pipette (column 8, lines 20-31) or an eyedropper (column 12, lines 60-62). The rate modifier can be detergent, nonionic surfactants such as polysorbate, cationic ones such as tetrabutylammonium

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bromide, and a whole list of Applicant's claimed initiators which includes phase transfer catalysts (column 9, lines 42-68). The material may be useful as tissue adhesives and other implantable biomedical applications (biocompatible) (column 11, lines 20-28).

Leung teaches that the container holding the polymerizable and/or crosslinkable material may comprise the rate modifier wherein the material is stored separately within the applicator container so as not to contact the rate modifier within the container. The container may be lined or coated with the rate modifier (column 10, lines 43-53). An embodiment is shown below.



Because Leung's teaching that the polymerizable and/or crosslinkable material should not contact the rate modifier provides the motivation to separate the material from the rate modifier, it would have been obvious to one of ordinary skill in the art to have coated the rate modifier on the surface of frangible container 400 as an alternative. The rate modifier would still be in the same space between the outer wall of the body 200 and the inner wall of the container 400, just on the outer wall of the container 400 instead of the inner wall of container 200, still separated from the polymerizable and/or crosslinkable material. The frangible vial (tube) 400 is made of glass and the outer container 200 is flexible (column 8, lines 20-30 and column 12, lines 5-20).

Furthermore, Leung teaches that the container may be lined or coated with the rate modifier (column 10, lines 43-55). Because the terms "lined" and "coated" are paired in the alternative, coupled with the fact that the rate modifier would still be in the same space between the inner wall of the applicator container and the outer wall of the container containing the material, in compliance with the teaching of noncontact of the rate modifier with the polymerizable and/or crosslinkable material, it would have been obvious to one of ordinary skill in the art to have coated the outer surface of the (inner) container as an alternative to lining the inner surface of the (outer) container.

Leung teaches a process of making the applicator wherein the applicator tubes (flexible tubes) are squeezed to shatter the glass ampoules (frangible vials) thereby releasing monomer material. The applicator is then inverted and the material is forced out the tip by squeezing the applicator tube (column 12, lines 16-25).

Leung teaches a process of making the applicator wherein the applicator tubes are squeezed to shatter the glass ampoules (frangible vials) thereby releasing monomer material. The applicator is then inverted and the material is forced out the tip by squeezing the applicator tube (column 12, lines 16-25). One of ordinary skill in the art would have known that the inner glass ampoule would have to be sealed after the addition of the polymerizable and/or crosslinkable material.

Therefore it would have been obvious to one of ordinary skill in the art to have worked out the claimed steps of the process from the invention of Leung.

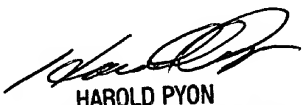
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Any inquiry concerning this communication should be directed to Sow-Fun Hon whose telephone number is (703)308-3265. The examiner can normally be reached Monday to Friday from 9:00 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon, can be reached on (703)308-4251. The fax phone number for the organization where this application or proceeding is assigned is (703)872-9310.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0661.

SH  
Sow-Fun Hon  
08/26/03

  
HAROLD PYON  
SUPERVISORY PATENT EXAMINER  
1772

8/29/03